Reporting Federal Activities . . .

Higher Education

Features for JANUARY–FEBRUARY 1962

University-Federal Cooperation in Career Development

JOHN W. MACY, JR.

Federal Programs Affecting College Education in Agriculture

HENRY S. BRUNNER

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
Office of Education

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University-Federal Cooperation in Career Development

By JOHN W. MACY, Jr.*

This is the first of two articles which Mr. Macy has contributed to Higher Education. *The second, "Partners in Public Service," will appear in a later issue.*

THERE IS an exciting untapped potential in the development of closer working relations between universities and government in the whole area of post-entry training and education. A move to tap that potential was made when a conference of university and government officials and prominent citizens from other professions was held at Princeton, November 2–4, 1961, to discuss means for improving university-government cooperation in developing careers of government employees. The participants laid a good foundation for future cooperation by

—pointing out the training needs in government
—challenging universities to experiment with new approaches to education for public leadership
—stimulating foundations to take an active interest in supportive studies and programs
—agreeing on the action to be taken on a number of items.

Recommendations of the Conference

Specifically, the participants recommended that cooperative programs be developed along the following lines.

1. The government should define more fully its long-range needs for career development. Government should provide training in specific skills for the immediate job but call more upon universities for assistance in educating career employees. Universities should provide intellectual conditioning which will break down provincial patterns that come from close personal identification with the values of specific programs. They should stimulate students to acquire breadth of understanding of the government and of society as a whole. Before either the Government or the universities can plan and initiate a satisfactory program of training and education, they should have a clear-cut design of the Federal need for career development.

2. The universities should provide more interdisciplinary programs for Federal career officials. By mid-career, many officials have great depth in a profession or technical field. However, they tend to reach a plateau; they may consider they have reached their destination. University education may stimulate such men to seek broader, more responsible and challenging assignments. Many of these new assignments would involve patterns of administration which would transcend the specific

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Mr. Macy served as President of the American Society for Public Administration in 1958–59 and is currently serving as a member of the Board of Trustees of Wesleyan University.

and pragmatic values of a given profession—assignments that called on them for synthesis as well as analysis.

The target for broadening education would be better understanding of the structure of organizations and society, insight into national goals, and understanding of the dynamic means of achieving them, and for both conformity and creativity in the management process. No one academic discipline can develop these qualifications. The body of knowledge needed by professional management in the public service has expanded widely in the last decade. This expansion calls for administrators in the public service with broad backgrounds in order that they may make critical decisions with dispatch and accuracy.

Universities can help meet these needs—indeed, they have a near monopoly on the only resources which *can* meet these needs—by providing for extended mid-career interdisciplinary programs and by deepening current efforts in short-term executive development institutes.

As part of its plan to strengthen career development in Government through opportunities for graduate training in colleges and universities, the Civil Service Commission recently recommended the creation of a pilot program of career educational awards at graduate levels to be administered by a non-Government public-service organization. This recommendation has now been implemented by a $2.5 million program sponsored by the Ford Foundation. It will be administered by the National Institute for Public Affairs (a private organization formed in 1934 to attract college graduates to the Federal service) in cooperation with the Civil Service Commission. The program will provide a year of full-time graduate education to 450 or 500 promising young government officials over an 8- to 10-year period. A selective screening process will limit the awards to about 50 persons each year. It is expected that most of the persons selected will have from 4 to 6 years' service in Federal Government. They will be paid their regular salaries by their employing agencies while they are pursuing their graduate work at a college of their choice.

The purpose of the awards is as follows:

A. Develop selected manpower resources within the Federal Government for improved performance.

B. Provide for a graduate educational experience which will be an integral part of a career plan, relating the past experience of the participant to the educational experience and relating both to his potential future use.

C. Improve teaching practice and curriculums by encouraging universities to modify their curriculums to satisfy the modern needs of public administration practitioners, and to become more flexible in providing for educacational experiences.

D. Create a method for the intellectual cross fertilization of practitioners and teachers in the field of public administration.

E. Motivate college graduates of high quality to enter the public service with the idea that they will be able to continue their graduate education.

F. Motivate the retention in the public service of high quality potential managers who have demonstrated an interest in and an aptitude for combining work plans and experience with academic competence.

3. Government should strengthen its training programs within the service. The Government needs to provide training at different stages of Federal careers. For careers leading to executive positions, training is needed in supervision and management methods.

The ability to exercise leadership in high-level executive positions does not spring naturally from routine or from long exposure to highly specialized single-project assignments. Its development requires deliberate, continuing stimulation through planned executive education. Although the Government is conducting excellent programs for developing technical talent and supervisory skills, and has done a good job of preparing agency executives for specific agency responsibilities, it needs to supplement these with a program of high-level executive education—a capstone developmental program to help career executives with outstanding potential to develop themselves to fill positions demanding governmentwide leadership. The Government needs a center for executive training, parallel to senior staff colleges of other nations. The objectives of such an organization would be:

1. To provide career executives with the opportunity to deepen their understanding of the major problems of government—national and interna-

tional—so that they may better comprehend the scope of their work and the impact and consequences of their decisions on national needs and purposes.

2. To make available to career executives the time and opportunity to renew and enlarge their understanding of the great issues of society in this century.

3. To provide an opportunity to study the fundamental tenets of the democratic process and to review the foundations of governmental institutions.

4. To enable executives to evaluate administrative theories as they are applied in an environment of scientific and social change in order to ensure the most effective administration of the public business and the best use of resources.

5. To enable executives to examine the interrelationship of government, business, education, and other agencies and institutions in achieving total national purposes.

6. To foster a sense of common purpose, to increase understanding, and to stimulate sound approaches to common problems among career executives of diverse interests and experiences.

By providing opportunities for senior executives to meet with each other, the center should achieve, as a byproduct, better interdepartmental coordination.

4. Both the universities and the government should encourage the major segments of the economy to cooperate in their efforts to increase the total supply of trained manpower in the Nation as a whole.

Trained men and women are our most important resource. The Communist challenge demands that we develop every individual—on the job and in school—to the full realization of his potential. We must revise some of the stereotypes which tend to oversimplify the problems of development and utilization. Training may and often does increase the visibility and desirability of an individual to a competing business or government organization, but we must not withhold educational opportunities because of this. Our training expenditures must be based on the premise that a trained man is an asset to society rather than on narrowly self-protective considerations. The Government, industry, and our universities must cooperate to build manpower resources for the nation.

5. The Government should select more carefully than it has in the past those employees who are to obtain advanced education. Employees should not be selected for educational opportunities because they are the most—rather than the least—available persons in the organization. Training should be a prestige reward for top performance.

Government executives attending university programs should feel that they are very much on duty—only the location of activity has changed.

Individuals should be selected for advanced educational opportunities after careful evaluation of both organizational and individual needs. Our Government agencies are beginning to do this.

6. Universities and government should maintain closer liaison on education for Federal careers. Universities need more information about Federal careers and government needs more information about university services. The Civil Service Commission, therefore, is planning to establish joint college-Federal service councils in major areas following the successful operation of councils now in operation in New York and Los Angeles. These pioneering efforts have demonstrated the effective work that colleges and Federal agencies can accomplish as partners in the most important business of government and adult education.

The Challenge

Employment is the beginning of a new and exciting experience for persons who enter the Federal service. Those among them who have been college students, immersed for years in developing the theoretical foundations of their chosen professions, are impatient to test the cutting edge of their knowledge in challenging job assignments. But whether they are from college, business school, or elsewhere, the early years on the job are an important shakedown period for the growth and development of all. Employees are tested early through rigorous and productive assignments. Jobs are the building blocks of Federal careers and competent performance in the lower level positions necessarily is a prerequisite to promotion to higher assignments.

Government operations are much more saturated with educational considerations than is normally realized. The job itself is a growth experience. The incumbent is a better man—or a worse one—for having worked in a specific assignment. A supervisor is in part a teacher. The climate of an organization dictates the extent to which an individual will be motivated to educate himself.

The guiding principle is that employees must both *earn* and *learn* on their way up the management ladder. This philosophy, however, does not represent any narrow dedication to pragmatic values as such. It recognizes that the central sources of motivation for education and growth of the individual are the standards against which he may continuously test his capacity for adjustment. A demanding job provides such a standard in the early career years. Long continued, however, it develops liabilities as well as assets. To guarantee that job assignments continue to provide useful educational experiences for the individual, the Government is therefore sponsoring a system of career development which emphasizes balanced growth through (1) individual self-development, (2) agency training programs, (3) inter-agency training programs, and (4) educational opportunities in outside educational institutions at advanced career levels.

If a person does not spend a significant part of his life in advanced study, his skills and knowledge may soon become obsolete. It is vital for the Government to provide both inservice and outside educational opportunities to be sure that this erosion of origi nal capacity does not become so serious as to jeopardize either the career of the individual or the possibilities of his maximum contribution to the public service.

Federal Programs Affecting College Education in Agriculture

By HENRY S. BRUNNER*

THE PROBLEM in discussing this topic must be recognized as a problem of delimitation. All Federal Government and national organization programs affecting the national economy also affect agricultural education inasmuch as the agricultural industry—the production, processing, and distribution of food and fibre—is an inseparable part of the economy of this Nation and all other nations. It should be possible, however, to achieve some measure of specificity by giving attention to two broad areas: (1) The philosophy governing policy affecting agricultural education as expressed by government officials and other national leaders, and (2) financial support for educational programs involving preparation for careers in the agricultural industry, including international programs in which the United States is participating.

To open the recent Centennial Lecture Series of the U.S. Department of Agriculture under the general theme "Growth Through Agricultural Progress," Secretary of Agriculture, Orville L. Freeman, speaking on the topic "Agriculture, Today and Tomorrow," presented and justified three broad goals for the agricultural industry: (1) Providing basic human needs, (2) providing adequate reward to farmers, and (3) looking to resources for the future. In discussing these, Secretary Freeman pointed out that science and technology have now progressed to the point that for the first time in history it is possible to foresee the production of enough food and fibre so that no one in the world need be in want for the basic material goods he needs. American agriculture has certainly been successful in producing food and fibre to meet the needs of our people and to furnish a basis for economic growth. "But," says Secretary Freeman, "abundant productivity is not enough, unless those who produce that abundance receive a fair reward for the capital, labor, and managerial effort they invest." He also believes that "one of the principal factors in our agricultural success is the application of the skill and ability of the American farmer in an agricultural economy based upon free enterprise and personal incentive on an owner-operated family farm; and that this system of agriculture has, by its very success, proved its overall superiority, in both human and economic terms over other forms of land tenure and agricultural organization."

Everyone agrees that our problems of adjustment must be approached with consideration for the scientific and technological revolution that characterizes and dominates this age in which we live. Secretary

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Freeman said, "The magnitude of the potential effect of this revolution upon our lives and our future is so great that the impact of previous great historical developments, such as the industrial revolution, fades into relative insignificance." And he added, "A second aspect of this revolution that has tremendous import for us today is the extent to which it links the future of every individual on earth to what happens in the rest of the world."

In this same Centennial Lecture Series James H. Hilton, president of Iowa State University, speaking to the topic "The Land-grant College: Past and Present," questioned whether "we in the land-grant colleges are giving enough thought to what our future should be." In elaboration he said: "Our colleges and universities today have a responsibility for meeting the growing need for social intelligence—for providing the kind of education which will give young men and women the social understanding which enables them to perceive their economic, social and political interdependence; to appreciate the needs and problems of other groups and other nations; to realize that the causes of social and economic ills and political dangers are seldom single-headed and one-sided; to foresee the probable effects of actions proposed for their group or their nation."

Speaking to the point of "balance" in our curriculum, Dr. Hilton suggested that the time is not too far off when we will be obliged to think more creatively of building curriculums around new types of course integration; of developing new syntheses of academic disciplines. He said: "It may well be that the traditional scientific disciplines, which are the product of the meager knowledge of an earlier time, will have to be replaced by new structures for organizing knowledge; . . . our programs of research must *also* deal with the problems of economic and social adjustments, must increasingly be oriented around people and their welfare."

On the occasion of his induction into office as United States Commissioner of Education, Sterling M. McMurrin ended his acceptance speech by saying: "Throughout the world there is a growing faith in education as the one road to an abundance of material wealth. But more than this, education is the road to cultural enrichment, to intercultural communication, and to worldwide understanding. Most important, education is the road to genuine freedom—the freedom and dignity of the individual."

In his message to Congress in February 1961, President Kennedy stated: "Our progress as a nation can be no swifter than our progress in education. Our requirements for world leadership, our hopes for economic growth, and the demands of citizenship itself in an era such as this all require the maximum development of every young American's capacity. . . . Our twin goals must be: A new standard of excellence in education and the availability of such excellence to all who are willing and able to pursue it."

These proposals from our government and university officials present the ideas which Federal administrative efforts are likely to reflect. It follows that these ideas have implications for the planning of educational programs in colleges and universities.

TO SUBSTANTIATE my statement that the problem in discussing this topic was one of delimitation, I call your attention to the publication *Federal Funds for Education 1958–59 and 1959–60* (OE–10009), which lists 40 different educational programs supported by Federal financial aid. They range from "Books for the Blind" to "War Orphans' Educational Assistance." Because our interest is pointed to agriculture, we can be selective.

We turn first to the supplementary land-grant funds. Public Law 86–658, passed in 1960, increased funds for instruction and instructional facilities in the land-grant colleges for the first time since 1935. In 1961 the 87th Congress appropriated $10,744,000 for this purpose, an increase of $5,692,500 over the previous years. The Senate Committee report notes that the amount appropriated is $3,756,000 less than the P.L. 86–658 authorizes, but says that the "Committee was told that President Kennedy considers the budget estimate to be first of the two steps to reach the maximum authorization."

The accompanying tabulation shows how the appropriated funds will be allocated to the States in terms of uniform grants and variable amounts based upon proportionate population.

For the other programs pertaining directly to agriculture and the land-grant colleges, the Congress appropriated $35,553,000 in 1961 for grants-in-aid for agricultural research, an increase of $3,000,000 over 1960; $59,590,000 for Cooperative Extension, an increase of $3,012,000; $2,464,500 for the Federal Extension Service; and $77,311,000 to the Agricultural Research Service of the Department of Agriculture for its own operation, an increase of $6,200,000.

IN 1961 the Congress also extended The National Defense Education Act and its present provisions for a 2-year period, which means that student loans and grants for research in the development and use of new educational media will continue to be available through the 1963–64 academic year and that 1,500 more graduate fellowships will be available in each of these 2 years.

From the beginning of the student loan program in February 1959 through June 1961, 237,000 undergraduate and graduate students borrowed $130,600,000. During this academic year, 180,000 students are expected to borrow about $90 million. High school students planning to enter agricultural colleges may apply for these loans through the deans of agriculture to the financial aid officer or official in charge of the loan program.

Under the graduate fellowship program, 526 programs in 145 graduate schools have been approved and are operating. Of these, 322 were approved for the 1959–60 or 1960–61 academic years, and 204 or nearly half of the total, are new programs approved for 1961–62. These programs were selected from 948 proposals from 160 graduate schools involving requests for 5,094 fellowships. Each year about 5,000 fellowships are requested and 1,500 are granted.

In past years some of the student loans and the graduate fellowships have been assigned to students in agbiochemistry, soil science, and other agricultural curriculums.

Title VII of NDEA provides for research, experimentation, and dissemination of information for more effective utilization of television, radio, motion pictures, and related media for educational purposes. This program provides an opportunity for faculty groups or individuals to secure financial support for well-designed research projects in the use of new media in teaching. The Office of Education publishes a periodical report on research in progress under the title, "News and Reports." Copies are available upon request.

For the current year the Cooperative Research Program, authorized by Public Law 83–531, also administered in the Office of Education, has an appropriation of $5 million for grants to support basic educational research. Project proposals are submitted three times a year (April 1, September 1, and December 1) for review by the Research Advisory Committee composed of recognized leaders in educational research. The committee evaluates the proposals in the light of criteria which deal with (1) significance of the problem for education, (2) soundness of research design, (3) personnel and facilities available, (4) economic efficiency or relationship of procedure and probable outcomes to expenditure.

Another program useful to educational research workers, "The Clearinghouse of Studies on Higher Education," has been organized in the Division of Higher Education of OE. Through the Clearinghouse the Division makes an effort to identify and catalog recently completed studies on higher education undertaken by or for institutions of higher education. Two publications, "The Reporter" and "Special Reports" list, cross-index, and briefly describe the studies.

THE APPROPRIATION for the National Science Foundation for this year is $263,250,000. If past practice and policy are followed, about half of this will be expended in direct support of basic research projects and facilities. Most of the remainder will be used for support of scientific manpower through fellowships, institutes, research activities for teachers, science education for undergraduates, science education for secondary school students, improvement of course content, technical manpower information, and international science education. Of the fellowship awards at all levels, about one-fourth are in agriculture and the life sciences, including biochemistry, botany, biology, genetics, microbiology, and zoology.

THE Area Redevelopment Act (authorized by Public Law 87–27), a very significant program, extends to urban areas the idea of the Rural Area Development Program, a program operated by the Department of Agriculture as a pilot program. The act authorizes $75 million in grants and $100 million in loans for public facilities projects; $300 million in loans for area (economic) development projects, with $4 million annually for technical assistance in these projects; and $4,500,000 annually for an occupational training and retraining program, with $10 million annually for subsistence payments to those in the training programs. It also specifies that there shall be an area development administrator in the Department of Commerce and that he shall be responsible to the Secretary of Commerce. The Secretaries of Agriculture; Health, Education, and Wel-

Table 1. Funds allotted to States and possessions for land-grant colleges and universities: Colleges of agriculture and mechanic arts, fiscal year 1962

State or possession	Total	Morrill-Nelson funds [1]	Bankhead-Jones funds [2]		
			Total	Uniform grants	Variable grants [3]
Total	$10,744,000.00	$2,550,000	$8,194,000.00	$4,590,000	$3,604,000.00
Alabama [4]	$205,078.83	50,000	155,078.83	90,000	65,078.83
Alaska	144,505.62	50,000	94,505.62	90,000	4,505.62
Arizona	165,941.19	50,000	115,941.19	90,000	25,941.19
Arkansas [4]	175,585.48	50,000	125,585.48	90,000	35,585.48
California	453,112.54	50,000	403,112.54	90,000	313,112.54
Colorado	174,941.51	50,000	124,941.51	90,000	34,941.51
Connecticut	190,506.03	50,000	140,506.03	90,000	50,506.03
Delaware [4]	148,890.87	50,000	98,890.87	90,000	8,890.87
Florida [4]	238,643.22	50,000	188,643.22	90,000	98,643.22
Georgia [4]	218,553.35	50,000	168,553.35	90,000	78,553.35
Hawaii	152,605.86	50,000	102,605.86	90,000	12,605.86
Idaho	153,291.54	50,000	103,291.54	90,000	13,291.54
Illinois	340,833.24	50,000	290,833.24	90,000	200,833.24
Indiana	232,884.63	50,000	182,884.63	90,000	92,884.63
Iowa	194,934.67	50,000	144,934.67	90,000	54,934.67
Kansas	183,401.51	50,000	133,401.51	90,000	43,401.51
Kentucky [4]	200,525.06	50,000	150,525.06	90,000	60,525.06
Louisiana [4]	204,885.23	50,000	154,885.23	90,000	64,885.23
Maine	159,309.35	50,000	109,309.35	90,000	19,309.35
Maryland [4]	201,770.82	50,000	151,770.82	90,000	61,770.82
Massachusetts [4]	242,568.14	50,000	192,568.14	90,000	102,568.14
Michigan	295,850.89	50,000	245,850.89	90,000	155,850.89
Minnesota	208,009.78	50,000	158,009.78	90,000	68,009.78
Mississippi [4]	183,392.15	50,000	133,392.15	90,000	43,392.15
Missouri [4]	226,057.78	50,000	176,057.78	90,000	86,057.78
Montana	153,442.47	50,000	103,442.47	90,000	13,442.47
Nebraska	168,116.01	50,000	118,116.01	90,000	28,116.01
Nevada	145,683.21	50,000	95,683.21	90,000	5,683.21
New Hampshire	152,090.86	50,000	102,090.86	90,000	12,090.86
New Jersey	260,860.27	50,000	210,860.27	90,000	120,860.27
New Mexico	158,945.94	50,000	108,945.94	90,000	18,945.94
New York	474,331.09	50,000	424,331.09	90,000	334,331.09
North Carolina [4]	230,766.10	50,000	180,766.10	90,000	90,766.10
North Dakota	152,599.36	50,000	102,599.36	90,000	12,599.36
Ohio	333,367.39	50,000	283,367.39	90,000	193,367.39
Oklahoma [4]	186,383.25	50,000	136,383.25	90,000	46,383.25
Oregon	175,235.15	50,000	125,235.15	90,000	35,235.15
Pennsylvania	365,500.38	50,000	315,500.38	90,000	225,500.38
Puerto Rico	186,806.78	50,000	136,806.78	90,000	46,806.78
Rhode Island	157,122.41	50,000	107,122.41	90,000	17,122.41
South Carolina [4]	187,465.19	50,000	137,465.19	90,000	47,465.19
South Dakota	153,556.96	50,000	103,556.96	90,000	13,556.96
Tennessee [4]	211,062.28	50,000	161,062.28	90,000	71,062.28
Texas [4]	330,842.92	50,000	280,842.92	90,000	190,842.92
Utah	157,742.75	50,000	107,742.75	90,000	17,742.75
Vermont	147,767.07	50,000	97,767.07	90,000	7,767.07
Virginia [4]	219,028.15	50,000	169,028.15	90,000	79,028.15
Washington	196,840.71	50,000	146,840.71	90,000	56,840.71
West Virginia	177,062.65	50,000	127,062.65	90,000	37,062.65
Wisconsin	218,725.90	50,000	168,725.90	90,000	78,725.90
Wyoming	146,575.46	50,000	96,575.46	90,000	6,575.46

[1] Continuing appropriation. Act approved August 30, 1890, as amended; and Act approved March 4, 1907.

[2] Based on 1962 budget estimate. Act approved June 29, 1935, as amended June 12, 1952, and July 14, 1960.

[3] Based on 1960 United States Census of Population.

[4] Two land-grant institutions in this State receive a stipulated proportion of the funds allotted.

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fare; Interior; Labor; and Treasury; and the Administrators of the Housing and Home Finance Agency and the Small Business Administration are to constitute an advisory policy board.

While the Rural Areas Development Program in the Department of Agriculture will continue in its operation as planned, it will be stimulated and augmented by these additional funds, especially in the counties designated by the Secretary of Commerce as "redevelopment areas" on the basis of criteria involving the degree of employment, percentage of low-income (farm) families, employment opportunities, availability of manpower, and other relevant factors.

The training and retraining programs will be for workers in all classes of occupations in accordance with the needs in an area. They will be conducted under authority of the Secretary of Health, Education, and Welfare, upon request of the Secretaries of Agriculture and Labor, who will evaluate and determine the needs in the redevelopment areas. These programs will undoubtedly have considerable influence upon the growth of area vocational schools, may create a need for more teachers of vocational agriculture, and may result in demands for short or terminal course offerings in the colleges.

THE MOST comprehensive action taken by Congress in 1961 with respect to educational activities is called the Act for International Development of 1961 (P.L. 87-195). The provisions of this act have been descriptively summarized as:

A NEW PROGRAM WITH NEW CONCEPTS [1]

*A Unified Administration
—Tying together existing aid units
—Centralizing programming
—Clarifying responsibility
—Attracting professional personnel of high quality
*With a Flexible Set of Tools
—LONG-TERM LOANS repayable in dollars
—SUPPORTING ASSISTANCE for strategic purposes
—DEVELOPMENT GRANTS chiefly for education and human resources
—FOOD FOR PEACE
—PEOPLE: Administrators, advisers, Peace Corps
*And Long-Term Availability
—Through 5-year borrowing authority for loans
—Grants available beyond end of fiscal year
—Recognizing that the next few years can be critical for the Free World
*To Stimulate and Respond to Sound Country Programs
—By nations willing to budget their resources for growth and to take necessary measures of social, fiscal, and governmental reform
*Using Systematic Research
—To improve the effectiveness of our assistance efforts
*Drawing on the Financial and Management Assets of Private Enterprise, through
—Broader guaranties and
—Investment surveys
*Mobilizing Free World Aid Sources
—Coordinating multilateral programs
—Increasing amounts of aid
—Lengthening commitments

This act specified that the formal authority tying together existing aid units should be organized within 60 days. The organization has been designated as the Agency for International Development (AID). The International Cooperation Administration, as we have known it in one form or another for the past 10 years, has been made a part of this larger program. This will affect the students coming to the land-grant institutions from other countries under both ICA and Foreign Agricultural Service and, to some extent, the contracts with institutions in other countries. While previously in these programs the problems were approached from the point of view of the several branches of technical learning, in the future they will be approached as part of the total socio-economic problem for a country or for a region. It has been suggested that the staffing needs will be for men trained in public administration with an understanding of the agricultural industry because agriculture is still the basic problem and the chief industry in the countries to be served.

There are four regional bureaus in AID: One for the Far East, one for the Near East and South Asia, one for Latin America, and one for Africa and Europe. Projects and programs in the different countries are to be established through these regional offices and on the basis of careful surveys of need and potential.

One section in the act provides specifically for Loans to Small Farmers "to provide assistance designed to improve agricultural methods and techniques, to stimulate and encourage the development of local programs of self-help and mutual cooperation, particularly through loans of foreign currencies for associations of operators of small farms formed for the purpose of joint action designed to increase

[1] *An Act for International Development—A Summary Presentation, June 1961* Washington, U.S. Department of State Publication 7224, General Foreign Policy Series 174, p. vi.

or diversify agricultural productivity." Another section, titled "Assistance to Countries Having Agrarian Economies," specifies that "emphasis shall be placed on programs which reach the people in such country who are engaged in agrarian pursuits or who live in the villages or rural areas in such country, including programs which will assist them in the establishment of indigenous cottage industries, in the improvement of agricultural methods and techniques, and which will encourage the development of local programs of self-help and mutual cooperation."

The Peace Corps was separately considered and separately authorized by Congress but in all quarters is considered a part of the whole national effort to aid economic and social development abroad. Peace Corps members will be assigned to work with and fill out the staffs of projects organized under other assistance programs as well as educational and training programs.

The "Mutual and Cultural Exchange Act" (P.L. 87–256) revises and consolidates previous legislation governing educational and cultural exchange programs, and supersedes the Fulbright and Smith-Mundt Acts. It gives authority directly to the President "to provide, by grant, contract, or otherwise, for (1) educational exchanges, by financing studies, research, instruction, and other educational exchanges; and (2) cultural exchanges, e.g., by financing visits and interchanges of leaders, experts in fields of specialized knowledge or skill."

Specific provisions are made for "establishing and operating in the United States and abroad centers for cultural and technical interchanges . . ." and for "assistance in the establishment, expansion, maintenance, and operation of schools and institutions of learning abroad, founded, operated, or sponsored by citizens or nonprofit institutions of the United States, including such schools and institutions serving as demonstration centers for methods and practices employed in the United States."

"ALIANZA PARA PROGRESO" has commanded much attention and interest. This was the title used by President Kennedy for his address at a White House reception for Latin American diplomats and Members of Congress, at which he announced his request to Congress for an appropriation of $500 million to carry out the program of the "Act of Bogotá." The Act of Bogotá comprises the recommendations of the Inter-American Economic Conference held in September 1960 and includes measures for social improvement, creation of a special fund for social development, measures for economic development, and provisions for multilateral cooperation for social and economic progress. The $500 million appropriation by the U.S. Congress is considered an initial contribution to get this great joint effort started. We will be supported in our efforts by the Latin American countries. In summary, the program is designed "to help our Latin American neighbors in their own efforts to improve: agricultural production and rural living, housing conditions, water supplies and sanitation facilities, education and training facilities, and public health and medical facilities."

This program is, however, only a part of the much broader "Alliance for Progress," a plan combining the principles and purposes of the Organization of American States, Operation Pan America, and the Act of Bogotá. The program calls for development over a period of 10 years and a projected investment of $20 billion to enlist the full energies of the peoples and governments of the American republics in a great cooperative effort to accelerate the economic and social development of the participating countries of Latin America, so that they may achieve maximum well-being, with equal opportunities for all, in democratic societies adapted to their own needs and desires.

Among the stated goals of the Alliance, two pertain specifically to agriculture. One is to raise greatly the level of agricultural productivity and output and to improve related storage, transportation, and marketing services. The other is to encourage, in accordance with the characteristics of each country, programs of comprehensive agrarian reform leading to the effective transformation of unjust structures and systems of land tenure use, with a view to replacing latifundia and dwarf-holdings by an equitable system of land tenure so that, with the help of timely and adequate credit, technical assistance and facilities for the marketing and distribution of products, the land will become for the man who works it the basis of his economic stability, the foundation of his increasing welfare, and the guarantee of his freedom and dignity.

THE FORMER Organization for European Economic Cooperation (OEEC) has been reorgan-

ized to include the United States and Canada as member countries, and is now a 20-nation Organization for Economic Cooperation and Development (OECD). The topic for the first meeting of this new organization, held in Washington recently, was "Economic Growth and Investment in Education." The Conference characterized education as "one of the most forceful instruments of economic growth" and "one of the finest fruits" of that growth. OECD will consider educational expansion in the European countries in relation to the needs for education in general, and particularly for scientific personnel, educational facilities, and teachers. A severe teacher shortage appears to be one of the greatest obstacles to the expansion. It was estimated in the Washington meeting that Europe must double its expenditure for education from $9 billion to $18 billion annually by 1970, and that by then 750,000 more teachers will be needed, an average increase for the OECD European countries of 110 percent.

MENTION must also be made of the agricultural and educational agencies of the United Nations which are, in a large sense, Federal programs and which will be, at least indirectly, affected by the new legislation discussed in previous paragraphs: The Food and Agriculture Organization (FAO), World Health Organization (WHO), United Nations International Children's Emergency Fund (UNICEF), United Nations Education, Scientific, and Cultural Organization (UNESCO), and United Nations Technical Assistance (UNTA). These agencies are all constantly in need of well-trained men and women.

THERE IS no question but that the same forces of education, study, and research that have made American agriculture a magnificent success in the past hundred years can meet and solve the problems of the present and future. The administrative representatives of the students and agricultural faculties in the land-grant colleges and universities, can take great pride in the contribution their institutions have made to make American agriculture the most productive agriculture in the world. Now there must be diligence also in the building and management of educational programs that will prepare young men and women for responsibilities in an ever-expanding agricultural industry which must produce enough to supply the needs of all men and so lay the foundation for peace on this Earth.

Office of Education Studies and Surveys

Opening College Enrollment, Fall 1961

By EDITH M. HUDDLESTON*

ALMOST 4 million degree-credit students are now enrolled in the Nation's colleges and universities, according to the 1961 opening (fall) survey. Of the total, 26.4 percent are new students who enrolled for the first time in the fall of 1961 (table 1). Total degree-credit enrollments increased by 7.8 percent since the fall of 1960, but the increase for first-time enrollments was even greater—10.4 percent. Detailed data on total and first-time enrollments, by type and control of institution and by sex, are presented in table 2.

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In relation to population

Since a majority of students enrolled for degree-credit work are between the ages of 18 and 21, that age group is used here as a basis for comparing enrollment with population. For the 48 contiguous States and the District of Columbia, it is estimated that as of the fall of 1961 there are 37.6 degree-credit students for every 100 persons in the population aged 18–21. This is 2 more per 100 than in the fall of 1958 when the ratio was 35.6. Five years ago, in the fall of 1956, the ratio was 33.2.

By type of institution

Notable increases from 1960 to 1961 occurred in junior colleges and teachers colleges. Two of every 15 degree-credit students are enrolled in junior

Table 1.—Total and first-time opening enrollment of degree-credit students in all institutions: Fall 1961 and fall 1960

[Aggregate United States]

Number of institutions and enrollment	Fall 1961	Fall 1960	Percent change
Number of institutions	1,985	1,975	+1.0
Total enrollment	3,891,230	3,610,007	+7.8
First-time students	1,026,087	929,823	+10.4
Continuing students	2,865,143	2,680,184	+6.9
Percent of total enrollment:			
First-time students	26.4	25.8	
Continuing students	73.6	74.2	

Table 2.—Total and first-time opening enrollment of degree-credit students, by institutional control, level of offering, and sex: Fall 1961

[Aggregate United States]

Level of offering and sex	Type of institutional control	
	Public	Private
Total enrollment:		
All institutions	2,351,719	1,539,511
Men	1,444,594	979,393
Women	907,125	560,118
4-year institutions	1,893,423	1,476,804
Men	1,154,253	947,966
Women	739,170	528,838
Junior colleges	458,296	62,707
Men	290,341	31,427
Women	167,955	31,280
First-time enrollment:		
All institutions	653,183	372,904
Men	381,769	214,025
Women	271,414	158,879
4-year institutions	442,046	338,464
Men	251,690	197,471
Women	190,356	140,993
Junior colleges	211,137	34,440
Men	130,079	16,554
Women	81,058	17,886

colleges, as compared with 2 of every 16 a year ago (table 3). Teachers colleges account for 10.3 per-

Table 3. Percentage analysis of total and of first-time enrollment of degree-credit students: Fall 1961 and fall 1960

[Aggregate United States]

Type of institution	Percent of total enrollment [1]		Percent of first-time enrollment [1]	
	1961	1960	1961	1960
All institutions	100.0	100.0	100.0	100.0
4-year institutions	86.6	87.4	76.1	76.8
Junior colleges	13.4	12.6	23.9	23.2
4-year institutions:				
Universities	41.9	43.0	31.6	32.8
Liberal arts colleges	28.5	28.5	28.7	29.0
Independently organized professional schools:				
Teachers colleges	10.3	10.0	10.8	10.4
Technological schools	2.9	3.0	2.5	2.5
Theological, religious	1.1	1.2	.8	.7
Schools of art	.5	.4	.4	.3
Other professional	1.5	1.5	1.2	1.1

[1] Detail does not necessarily add to totals because of rounding. Percentages computed from unrounded figures.

cent of degree-credit students, the same proportion as in the fall of 1959 but larger than the 10.0 percent reported for 1960.

Since 1960, total enrollment in junior colleges increased by 14.9 percent and in teachers colleges by 11.8 percent (table 4). First-time enrollments in these institutions also show high proportionate increases in comparison with the overall increase of 10.4 percent (table 5).

The highest proportionate increases in total and first-time enrollment, though based on relatively small numbers, occurred in the independently controlled schools of art.

In publicly controlled and privately controlled institutions

Slightly more than 6 of every 10 degree-credit students attend publicly controlled institutions (table 6). In comparison with the overall increase of 7.8 percent since the fall of 1960, enrollment in publicly controlled institutions increased by 10.1 percent but in privately controlled institutions by only 4.4 percent.

Among publicly controlled institutions, the junior

Table 4. Total opening enrollment of degree-credit students, by type of institution and by sex: Fall 1961 and fall 1960

[Aggregate United States]

Type of institution	Number of institutions, 1961	Enrollment (in thousands)[1]		Percent change[2]
		Fall 1961	Fall 1960	
All institutions	1,985	3,891	3,610	+7.8
Men		2,424	2,271	+6.8
Women		1,467	1,339	+9.5
4-year institutions	1,458	3,370	3,156	+6.8
Men		2,102	1,987	+5.8
Women		1,268	1,169	+8.5
Junior colleges	527	521	454	+14.9
Men		322	283	+13.6
Women		199	170	+17.0
4-year institutions:				
Universities	143	1,630	1,551	+5.1
Men		1,114	1,072	+4.0
Women		515	479	+7.5
Liberal arts colleges	768	1,108	1,028	+7.9
Men		603	560	+7.7
Women		505	468	+8.1
Independently organized professional schools:				
Teachers colleges	197	402	359	+11.8
Men		193	171	+12.7
Women		209	188	+11.0
Technological schools	54	112	107	+4.7
Men		103	99	+3.9
Women		9	7	+14.9
Theological, religious	174	43	42	+2.7
Men		34	33	+2.6
Women		9	9	+3.0
Schools of art	47	18	15	+16.1
Men		9	8	+4.4
Women		9	7	+30.0
Other professional	75	58	55	+5.8
Men		46	44	+5.2
Women		11	11	+8.1

[1] Detail does not necessarily add to totals because of rounding.
[2] Percentages computed from unrounded figures.

Table 5. First-time opening enrollment of degree-credit students, by type of institution and by sex: Fall 1961 and fall 1960

[Aggregate United States]

Type of institution	Number of institutions, 1961	Enrollment (in thousands)[1]		Percent change[2]
		Fall 1961	Fall 1960	
All institutions	1,850	1,026	930	+10.4
Men		596	543	+9.8
Women		430	387	+11.2
4-year institutions	1,324	781	714	+9.2
Men		449	413	+8.6
Women		331	301	+10.1
Junior colleges	526	246	215	+14.0
Men		147	129	+13.4
Women		99	86	+14.9
4-year institutions:				
Universities	143	325	305	+6.4
Men		205	196	+5.0
Women		119	110	+8.9
Liberal arts colleges	759	294	270	+9.2
Men		154	140	+10.1
Women		141	130	+8.1
Independently organized professional schools:				
Teachers colleges	194	111	96	+15.3
Men		53	45	+17.6
Women		58	52	+13.2
Technological schools	51	25	23	+8.7
Men		23	21	+7.7
Women		3	2	+18.1
Theological, religious	96	8	7	+19.8
Men		5	4	+16.6
Women		4	3	+23.9
Schools of art	45	4	3	+45.1
Men		2	2	+15.7
Women		3	1	+77.2
Other professional	36	12	10	+23.8
Men		9	7	+19.9
Women		4	3	+33.3

[1] Detail does not necessarily add to totals because of rounding.
[2] Percentages computed from unrounded figures.

colleges showed a relatively larger enrollment increase (16.5 percent) since 1960 than the 4-year institutions (8.7 percent). But in the privately controlled group, both the 4-year institutions and the junior colleges increased by 4.4 percent.

In first-time enrollment, publicly controlled institutions showed an increase of 12.3 percent since 1960 as compared with a 7.2 percent increase in privately controlled institutions.

Of men and women

The percentage of women students is higher than at any time in the last 15 years—37.7 percent of the total in 1961—but still lower than the 40.2 percent recorded for the fall of 1939 (table 7).

Table 6.—Total opening enrollment of degree-credit students, in all institutions, in 4-year institutions, and in junior colleges, by type of institutional control: Fall 1939, 1949, and 1956–61

[Aggregate United States]

Fall	Total (thousands)	Publicly controlled		Privately controlled	
		Number (thousands)	Percent of total [1]	Number (thousands)	Percent of total [1]
	ALL INSTITUTIONS				
1939 [2]	1,365	727	53.2	638	46.8
1949	2,457	1,219	49.6	1,238	50.4
1956	2,947	1,682	57.1	1,265	42.9
1957	3,068	1,780	58.0	1,288	42.0
1958	3,259	1,912	58.7	1,346	41.3
1959	3,402	2,003	58.9	1,399	41.1
1960	3,610	2,136	59.2	1,474	40.8
1961	3,891	2,352	60.4	1,540	39.6
	4-YEAR INSTITUTIONS				
1939 [2]	1,215	619	50.9	597	49.1
1949	2,228	1,048	47.0	1,180	53.0
1956	2,599	1,383	53.2	1,216	46.8
1957	2,698	1,463	54.2	1,235	45.8
1958	2,872	1,581	55.0	1,291	45.0
1959	2,991	1,646	55.0	1,345	45.0
1960	3,156	1,742	55.2	1,414	44.8
1961	3,370	1,893	56.2	1,477	43.8
	JUNIOR COLLEGES				
1939 [2]	149	108	72.1	42	27.9
1949	229	171	74.6	58	25.4
1956	348	299	85.7	50	14.3
1957	370	317	85.6	53	14.4
1958	387	332	85.8	55	14.2
1959	411	357	86.7	55	13.3
1960	454	394	86.8	60	13.2
1961	521	458	88.0	63	12.0

NOTE.—Detail does not necessarily add to totals because of rounding.

[1] Percentages computed from unrounded figures.
[2] Continental United States (contiguous States); estimated.

The fall of 1961 marks the fifth consecutive year in which women's enrollments have shown greater percentage increases than men's. Since 1960, women's total enrollment increased by 9.5 percent as compared with 6.8 percent for men (table 4). The women's percentage increases in total enrollment exceeded the men's in every type of institution except teachers colleges, in which men have been showing heightened interest in recent years.

Table 7.—Total opening enrollment of degree-credit students by sex: Fall 1939 and 1946–61

[Aggregate United States]

Fall	Total (thousands)	Men		Women	
		Number (thousands)	Percent of total [1]	Number (thous sands)	Percent of total [1]
1939 [2]	1,365	816	59.8	549	40.2
1946 [2]	2,078	1,418	68.2	661	31.8
1947 [2]	2,338	1,659	71.0	679	29.0
1948	2,408	1,712	71.1	696	28.9
1949	2,457	1,729	70.4	728	29.6
1950	2,297	1,569	68.3	727	31.7
1951	2,116	1,399	66.1	718	33.9
1952	2,148	1,387	64.6	761	35.4
1953	2,251	1,432	63.6	818	36.4
1954 [3]	2,469	1,575	63.8	893	36.2
1955 [3]	2,679	1,747	65.2	931	34.8
1956	2,947	1,928	65.4	1,019	34.6
1957	3,068	2,003	65.3	1,065	34.7
1958	3,259	2,110	64.8	1,148	35.2
1959	3,402	2,174	63.9	1,229	36.1
1960	3,610	2,271	62.9	1,339	37.1
1961	3,891	2,424	62.3	1,467	37.7

NOTE.—Detail does not necessarily add to totals because of rounding.

[1] Percentages computed from unrounded figures.
[2] Enrollments for 1939, 1946, and 1947 are for continental United States (contiguous States); all other enrollments are for aggregate United States. Data for 1939 and 1946 are estimates.
[3] Classification of institutions by type adjusted to agree with classification in 1956.

Description of the survey

The survey covers the aggregate United States: the 50 States, the District of Columbia, and the outlying parts. All data in this article, unless otherwise noted, are for the aggregate United States.

The basic source of the institutional list for the survey was the *Education Directory 1960–61; Part 3, Higher Education.* An attempt was made, however, to take into account changes which would occur in the next edition of the directory (1961–62). Excluded from the survey were a number of 2- and 3-year semiprofessional schools and technical insti-

tutes whose programs are designed to prepare students for immediate employment in an occupation or cluster of occupations rather than for further study leading to a bachelor's-level degree.

The term "degree-credit students" designates students whose current programs consist "wholly or principally of work which is normally creditable toward a bachelor's or higher degree"—either in the institution in which the students are presently enrolled, or by transfer (as from junior colleges to 4-year institutions).

The 1961 survey *includes* undergraduate, graduate, special, and unclassified degree-credit students, both in residence and at extension centers, full time and part time, day and evening. Excluded are auditors or students enrolled for "short courses" or individual lessons, students taking courses at home by mail, radio, or TV, and nondegree-credit students in adult-education courses or terminal-occupational programs.

Institutional data

Total and first-time enrollments in the fall of 1961, by sex, for individual institutions have been published in Circular No. 675 (OE–54003–61), *Opening (Fall) Enrollment in Higher Education, 1961: Institutional Data.* Copies may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C., for 25 cents each.

A Selected Bibliography of Office of Education Publications on Higher Education, 1957–61

FOR the Combined Book Exhibit to be presented at the 17th National Conference on Higher Education, sponsored by the Association for Higher Education, to be held at the Morrison Hotel in Chicago, March 4–7, 1962, the Office of Education has prepared a bibliography of its publications on higher education issued during the 5-year period 1957 through 1961. Publications which are out of print and those consisting of less than 24 pages have been excluded.

The bibliography follows the subject classifications chosen by the Association for Higher Education Book Exhibit Committee. When subject matter of a publication pertains to more than one of the classifications, the title is entered under the classification most representative of the subject-matter emphasis.

When price of publication is listed, order from the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C. When ordering sales copies, please give the title of the publication and the catalog number which appears within parentheses as the final entry of the listing and is usually preceded by the letters FS. Enclose check or money order.

When no price is listed, order (except as noted) from Publications Distribution Unit, Office of Education, Department of Health, Education, and Welfare, Washington 25, D.C.

Historical, Philosophical, Sociological and General Development

Academic Degrees: Earned and Honorary Degrees Conferred by Institutions of Higher Education in the United States. Walter Crosby Eells and Harold A. Haswell. 1960, 324 p. $1. (FS 5.254:*54008*)

American Cooperation With Higher Education Abroad: A Survey of Current Programs. 1957, 211 p. 75 cents. (FS 5.3: 957/8)

Annual Report of the U.S. Department of Health, Education, and Welfare, 1959. 1960, 268 p. 75 cents. (FS 1.1:958)

Baccalaureate Degrees Conferred by American Colleges in the 17th and 18th Centuries. Walter Crosby Eells. 1958, 71 p. (Circular No. 528)

Bibliography: 1959 Publications in Comparative and International Education. 1960, 118 p. 75 cents. (FS 5.214:*14004–59*)

Education Beyond the High School. 1957, 32 p. 25 cents. (Pr. 34.8:Ed.8/4)

Education in the United States of America. 1960, 134 p. 50 cents. (FS 5.210:*10006*)

Engineering and Scientific Manpower. Henry H. Armsby. 1960, 68 p. (OE–*50003*)

Guide to the National Defense Education Act of 1958. Theodora E.

Carlson and Catherine P. Williams. 1959, 27 p. 25 cents. (FS 5.210:*10000*)

Handbook, Office of Education. 1960, 49 p. 25 cents. (FS 5.211: *11002*)

Earlier edition also available:

———, 1959–60, 94 p. 35 cents.

Progress of Public Education in the United States of America, 1960–61. 1961, 318 p. $1.25. (FS 5.210:*10005–61–A*)

Earlier edition also available:

———, 1959–60, 68 p. 30 cents.

Publications of the Office of Education, 1961. Beryl Parke. 52 p. 25 cents. (FS 5.211:*11000A*)

Publications of the Office of Education, 1937–59. Beryl Parke and Zelma E. McIlvain. 1960, 157 p. 50 cents. (FS 5.211: *11001*)

Report on the National Defense Education Act, Fiscal Year Ending June 30, 1960. 1961, 93 p. 55 cents. (FS 5.210: *10004–60*)

Second Report to the President. 1957, 108 p. 55 cents. (Pr. 34.8: Ed.8/957)

Soviet Commitment to Education: Report of the First Official U.S. Education Mission to the U.S.S.R. 1959. 135 p. 70 cents. (FS 5.214:*14044*)

Soviet Education Programs: Foundations, Curriculums, Teaching Preparation. William K. Medlin, Clarence B. Lindquist, and Marshall L. Schmitt. 1960, 281 p. $1.25. (FS 5.214: *14037*)

Statistical Summary of Education, 1955–56. (*Biennial Survey of Education in the United States*, ch. 1). Rose Marie Smith and W. Vance Grant. 1959, 96 p. 45 cents. (FS 5.210: *10003*)

Statistics of Higher Education: 1955–56. Faculty, Students, and Degrees. (*Biennial Survey of Education in the United States*). Henry G. Badger and M. Clemens Johnson. 1958, 152 p. 60 cents. (FS 5.23:954–56, ch.4, sec. 1)

Statistics of Land-Grant Colleges and Universities, Year Ended June 30, 1959. 1961. (In press) (FS 5.250:*50002–59*)

Earlier editions also available:

———, 1958, 141 p. 70 cents.

———, 1957, 101 p. 55 cents. **(FS 5.4:541)**

Organization and Administration

Administration of Higher Education—An Annotated Bibliography Walter Crosby Eells and Ernest V. Hollis. 1960, 410 p. $1.50. (FS 5.253:*53002*)

Advance Planning To Meet Higher Education Needs: Recent State Studies 1956–1959. S.V. Martorana and James C. Messersmith. 1960, 33 p. 30 cents. (FS 5.253:*53007*)

The College Presidency, 1900–1960: An Annotated Bibliography. Walter Crosby Eells and Ernest V. Hollis. 1961, 143 p. 60 cents. (FS 5.253:*53008*)

Cooperative Projects Among Colleges and Universities. S. V. Martorana, James C. Messersmith, and Lawrence O. Nelson. 1961, 45 p. 35 cents. (FS 5.250:*50020*)

Coordinating 2-Year Colleges in State Educational Systems. S. V. Martorana, *ed.* 1957, 86 p.

Criteria for the Establishment of 2-Year Colleges. D. G. Morrison and S. V. Martorana. 1960, 101 p. 45 cents. (FS 5.257:*57000*)

Higher Education in North Dakota, Vols. I and II, Ernest V. Hollis, S. V. Martorana, and staff members of the Division of Higher Education. 1958. (Published by the North Dakota Legislative Research Committee, State Capitol Building, Bismarck, North Dakota.)

Higher Education in South Dakota. Vols. I, II, and III. S. V. Martorana, Ernest V. Hollis, and staff members of the Division of Higher Education. 1960. (Published by the South Dakota Legislative Research Council, State Capitol Building, Pierre, South Dakota.)

Higher Education in the Tidewater Area in Virginia: A Condensation of the Complete Report. S. V. Martorana, Ernest V. Hollis, and staff members of the Division of Higher Education. 1959, 65 p. (Published by the State Council of Higher Education of the Commonwealth of Virginia, Richmond, Virginia.)

Higher Education in the Tidewater Area of Virginia. S. V. Martorana, Ernest V. Hollis, and staff members of the Division of Higher Education. 1959, 211 p. (Published by the State Council of Higher Education of the Commonwealth of Virginia, Richmond, Virginia.)

Patterns of Organization and Support in Public 2-Year Colleges. S. V. Martorana and D. G. Morrison. 1959, 25 p. (OE–52000)

State Boards Responsible for Higher Education. S. V. Martorana and Ernest V. Hollis. 1960, 254 p. $1.50. (FS 5.253: *53005*)

Survey of State Legislation Relating to Higher Education—January 1, 1960, to December 31, 1960. Ernest V. Hollis, William G. Land, and S. V. Martorana. 1961, 92 p. 60 cents. (FS 5.250:*50008–60*)

Earlier editions also available:

———, July 1, 1958, to December 31, 1959. 1960, 200 p. $1.25.

———, July 1, 1957, to June 30, 1958. 1959, 115 p. 70 cents. (FS 5.4:552)

———, July 1, 1956, to June 30, 1957. 1957, 104 p. 60 cents. (FS 5.4:511)

Finance, Budget, and Business Administration

College and University Endowment Investments: A Survey as of June 30, 1958. W. Robert Bokelman, J. Harvey Cain, and Ernest V. Hollis. 1959, 48 p. 35 cents. (FS 5.4:579)

Federal Funds for Education, 1958–59 and 1959–60. Clayton D. Hutchins, Albert R. Munse, and Edna D. Booher. 1961, 247 p. $1. (FS 5.210:*10009*)

Earlier edition also available:

———, 1956–57 and 1957–58. 204 p. 75 cents. (FS 5.3:959/2)

Statistics of Higher Education, 1957–58: Receipts, Expenditures, and Property. (*Biennial Survey of Education in the United States.*) (FS 5.250:*50023*)

Earlier edition also available:

———, 1955–56. 1959, 177 p. 65 cents. (FS 5.23: 954–56/ch. 4, sec. II)

Faculty Personnel

College and University Faculties: Recent Personnel and Instructional Practices. Clarence B. Lindquist. 1959, 61 p. 30 cents. (FS 5.359/27)

Faculty and Other Professional Staff in Institutions of Higher Education: First Term 1957–58. Wayne E. Tolliver and Hazel C. Poole. 1959, 68 p. 45 cents. (FS 5.253:*53000*)

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